IN THE CLAIMS:

Cancel the original claims and substitute the following new claims:

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15. A cell culture exhibiting cell-type specific or development-specific expression of a non-cell-damaging fluorescent protein due to activation of a cell-specific or development specific transcription factor at a certain point of differentiation in differentiating cells, said cell culture consisting of embryoid bodies formed by aggregates of embryonic stem (ES) cells of mice obtained by the hanging drop method and stably transfected with a DNA construct comprising:

a) a DNA sequence coding for said non-cell damaging fluorescent protein; and

b) a promoter operably linked with said DNA sequence, said promoter selected from a cell-dependent promoter, a development-dependent promoter, and a combination of a cell-dependent and a development-dependent promoter;

said DNA construct being integrated in the native DNA.

16. The cell culture according to claim 15, wherein said non-cell-damaging fluorescent protein is selected from Green Fluorescent Protein (GFP), Red Fluorescent Protein and Blue Fluorescent Protein.

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17. The cell culture according to claim 15, wherein said promoter is a promoter specific for heart cells, neurons, glia cells, hematopoietic cells, endothelial cells, smooth muscle cells, skeletal muscle cells, cartilage cells, fibroblasts or epithelial cells.

18. The cell culture according to claim 17, wherein said promoter is selected from Nkx-2.5, human α-actin and MLC-2V promoters.

19. The cell culture according to claim 18, wherein said promoter is the heart-specific human α-actin promoter.

20. The cell culture according to claim 15, wherein said DNA construct includes further functional DNA elements.

21. The cell culture according to claim 20, wherein said further functional DNA elements are selected from enhancer elements, selectable marker genes, or combinations of enhancer elements and selectable marker genes.

22. The cell cultures according to claim 15, wherein said DNA construct is the plasmid pCX-(a-act)GFP-Neo (DSM 11633).

23. A method for preparing a cell culture according to claim 15, comprising:

a) introducing a DNA construct as defined in claim 15 in starting ES cells of mice;

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b) screening for stably transfected ES cells; and

c) establishing embryoid bodies from said stably transfected ES cells in accordance with the hanging drop method.

24. The method according to claim 23, wherein said introducing is effected by electroporation.

25. The method according to claim 23, further comprising the culturing of said stably transfected ES cells in vitro.

26. A method for the toxicological examination of substances, comprising adding the substances to the cell cultures according to claim 15 and examining the toxicological effects of said substances on the cell cultures, using fluorimetric methods.

27. A method for producing a transgenic mouse exhibiting cell-type specific or development specific expression of a non-cell-damaging fluorescent protein, comprising:

a) injecting ES cells according to claim 15 into blastocysts of a mouse;

b) transferring the blastocysts into a surrogate mother; and

c) recovering said transgenic mouse from said surrogate mother.

28. A transgenic mouse obtainable by the method according to claim 27.